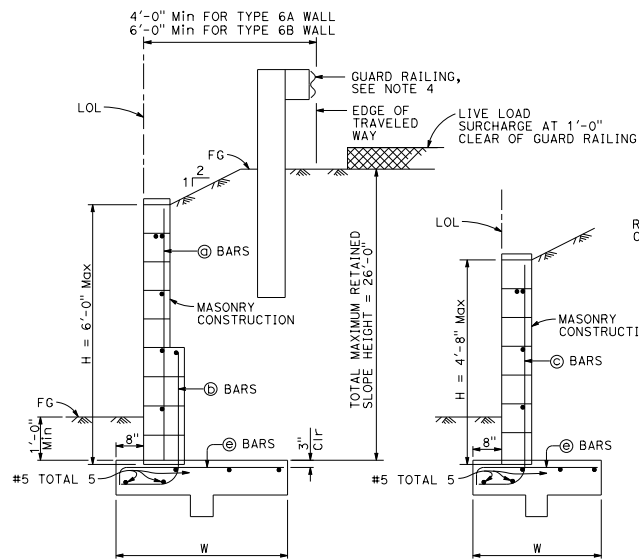
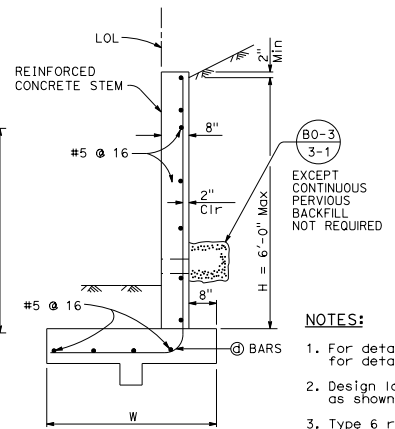


TYPE 6A WALL



TYPE 6B WALL



NOTES:

- For details not shown at "6B", see "6A", similarly, for details not shown at "6A", see "6B".
- Design loading for both Type "6A" and "6B" is as shown at "6B".
- Type 6 retaining wall shall be limited to use for walls of Design H of 6'-0" or less.
- Where traffic is adjacent to the top of wall, guard railing should be set back from the top front face of wall at least 4'-0" or 6'-0", dependent on wall type.
- For reinforced concrete wall stem joint details, see (B0-3) 3-3 and (B0-3) 3-4.
- No splices are allowed on @, @, @, and @ bars.
- See "Retaining Wall Type 6 Details" sheet for Elevation View and Footing Step Details.

SYMBOLS:

Ser - service limit state 1
 Str - strength limit state 1
 Ext - extreme event limit state 1
 B' - effective footing width (ft)
 q_0 - net bearing stress (ksf), OG assumed to be FG at toe
 q_0 - gross uniform bearing stress (ksf)

DESIGN NOTES:

DESIGN: AASHTO LRFD Bridge Design Specifications, 4th Edition with California Amendments
 Building Code Requirements for Masonry Structures (TMS 402-08/ACI 530-08/ASCE 5-08)

LS: 240 psf surcharge on level ground surface as limited by Guard Railing location

SEISMIC: $k_h = 0.2$
 $k_v = 0.0$

SOIL: $\phi = 34^\circ$
 $\gamma = 120$ pcf

REINFORCED CONCRETE: $f'_c = 3,600$ psi
 $f_y = 60,000$ psi

REINFORCED MASONRY: $f_m' = 1,500$ psi
 $f_y = 60,000$ psi

LOAD COMBINATIONS AND LIMIT STATES:
 Service I $Q = 1.00DC + 1.00EV + 1.00EH + 1.00LS$
 Strength I $Q = aDC + bEV + cEH + 1.75LS$
 Extreme I $Q = 1.00DC + 1.00EV + 1.00EH + 1.00EQD + 1.00EQE$

Where:
 Q: Force Effects
 a: 1.25 or 0.90, Whichever Controls Design
 b: 1.35 or 1.00, Whichever Controls Design
 c: 1.50 or 0.90, Whichever Controls Design
 DC: Dead Load of Structure Components
 EH: Horizontal Earth Fill Pressure
 EV: Vertical Earth Pressure from Earth Fill Weight
 LS: Live Load Surcharge
 EQE: Seismic Earth Pressure
 EQD: Soil and Structural and Nonstructural Components Inertia

DESIGN H	3'-4"	4'-0"	4'-8"	5'-4"	6'-0"
W	3'-8"	4'-1"	4'-8"	5'-3"	6'-9"
F	1'-0"	1'-0"	1'-2"	1'-3"	1'-4"
@ BARS	NONE	NONE	NONE	#5 @ 16"	#5 @ 16"
@ BARS	NONE	NONE	NONE	#5 @ 16"	#5 @ 16"
@ BARS	#5 @ 16	#5 @ 16	#5 @ 16	NONE	NONE
@ BARS	#5 @ 16	#5 @ 16	#5 @ 16	#5 @ 16	#6 @ 16
Ser: B', q_0	3.4, 0.3	3.8, 0.3	4.3, 0.3	4.9, 0.4	6.0, 0.4
Str: B', q_0	3.3, 0.7	3.6, 0.7	4.1, 0.8	4.7, 0.8	5.7, 0.9
Ext: B', q_0	1.3, 1.9	1.4, 2.0	1.7, 2.1	1.9, 2.2	3.9, 1.4

DESIGN H	3'-4"	4'-0"	4'-8"	5'-4"	6'-0"
W	4'-6"	5'-1"	5'-7"	6'-2"	6'-9"
@ BARS	NONE	NONE	NONE	#5 @ 16"	#5 @ 16"
@ BARS	NONE	NONE	NONE	#5 @ 16"	#5 @ 16"
@ BARS	#5 @ 16	#5 @ 16	#5 @ 16	NONE	NONE
@ BARS	#5 @ 16	#5 @ 16	#5 @ 16	#5 @ 16	#6 @ 16
@ BARS	#5 @ 16	#5 @ 16	#6 @ 16	#6 @ 16	#7 @ 16
Ser: B', q_0	3.3, 0.6	3.7, 0.8	4.0, 0.9	4.5, 1.0	4.1, 1.4
Str: B', q_0	1.9, 1.4	2.3, 1.6	2.5, 1.8	2.8, 1.9	1.8, 3.6
Ext: B', q_0	1.5, 2.8	1.8, 3.1	1.9, 3.6	2.1, 3.8	2.4, 3.9

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
RETAINING WALL TYPE 6 (CASE 2)
 NO SCALE

B3-7B